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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,663	11/26/2003	Thomas M. Iannarelli	986-1	7672
27758	7590	06/14/2005	EXAMINER	
MICHAEL F. PETOCK, ESQUIRE 46 THE COMMONS AT VALLEY FORGE 1220 VALLEY FORGE ROAD, P.O. BOX 856 VALLEY FORGE, PA 19482			LAVARIAS, ARNEL C	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/722,663	<b>Applicant(s)</b> IANNARELLI ET AL.	
	<b>Examiner</b> Arnel C. Lavarias	<b>Art Unit</b> 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/26/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Oath/Declaration***

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the mailing address of each inventor. A mailing address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing address should include the ZIP Code designation. The mailing address may be provided in an application data sheet or a supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76.

### ***Drawings***

2. The drawings were received on 11/26/03. These drawings are objected to for the following reason(s) as set forth below.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

Figures 2-4- Reference numeral 30.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are

not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Specification*

4. The disclosure is objected to because of the following informalities:

Page 8, after line 16- a brief description of Figure 9 is missing.

Appropriate correction is required.

*Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-5, 7-8, 11-13, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek (U.S. Patent No. 5179735) in view of Radna (U.S. Patent Application Publication US 2004/0070823 A1).

Thomanek discloses an apparatus for head mounting gear for hands free operation (See Figures 1-7) comprising a head mounting means (See 46, 47, 124, 130, 126, 133, 135, 137 in Figure 1, Figure 7) comprising an encircling band adapted to encircle a head of a wearer and a top band adapted to go over the top of the head of the wearer and connected to said encircling band; a mounting bracket (See 50, 42 in Figures 2, 7)

mounted to said encircling band; a support bar (See 24 in Figures 2-3) having a proximal (See region of 24 joining 52 in Figures 2-3) and a distal end (See region of 24 joining 60 in Figures 3-4); said support bar being lockable by a detent mechanism in a position for use (See 84 in Figure 2); a quick release mounting mechanism (See 63, 64, 65 in Figure 2) mounted on the distal end of said support bar; gear (See 10 in Figure 2) mounted to said quick release mounting mechanism; and wherein said gear may be used without being held by hand. Thomanek additionally discloses the proximal end of the support bar being provided with a spring loaded releasable pin which mates with an opening in the mounting bracket to form the detent mechanism (See 48 in Figure 3; 76, 81, 103 in Figures 2, 5); the pin in the proximal end of the support bar being released by a pin release means (See 84 in Figure 2; 33 in Figure 5); the quick release mounting mechanism being adjustably pivotally mounted on the distal end of the support bar (See 22, 23 in Figure 1; 72, 73 in Figures 2, 4); the support bar has two sections formed at approximately 90 degrees to each other (See 24 in Figure 3); the two sections of the support bar are provided with means for adjusting the length of each section (See 84, 52 in Figure 2; 52, 33, 60 in Figure 3); the encircling band is provided with means for adjusting its length (See for example 133 in Figures 1, 7); and the top band is provided with means for adjusting its length (See for example 126 in Figures 1, 7). Thomanek lacks said mounting bracket having a pivot means; said support bar being pivotally mounted at its proximal end to said pivot means of said mounting bracket; said support bar being lockable by a detent mechanism in a position for storage or a position for use which accommodates a wearer; and the gear being selected to be binoculars or a range

Art Unit: 2872

finder. However, Radna teaches a head-mounted assembly for mounting an optical system (See Figures 1-3), such as binoculars (See 6 in Figure 1), wherein a mounting bracket (See for example 24 in Figure 1) having pivot means (See Figure 1a) is attached to a proximal end of a support bracket (See 9 in Figure 1, 1a). Further, the support bracket is lockable by a detent mechanism (See 25, 26, 27 in Figure 1a) to any discrete number of positions in a 360-degree circle, such that the optical system may be positioned in or out of the person's viewing area, i.e. the binocular is in use or is in a stored position. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the mounting bracket have a pivot means; said support bar be pivotally mounted at its proximal end to said pivot means of said mounting bracket; said support bar be lockable by a detent mechanism in a position for storage or a position for use which accommodates a wearer; and the gear be selected to be binoculars or a range finder, as taught by Radna, in the apparatus of Thomanek, to 1) allow for quick positioning of the gear (i.e. binocular) during use, 2) prevent movement of the gear once the gear has been properly positioned, and 3) expand the range of usable applications of the head-mounted assembly.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek in view of Radna.

Thomanek in view of Radna discloses the invention as set forth above in Claim 1, except for the encircling band and top band being made of neoprene. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the encircling band and top band be made of neoprene, since it has been

held to be within ordinary skill of worker in the art to select a known material on the basis of suitability for the intended use. One would have been motivated to have the encircling band and top band be made of neoprene, to take advantage of this material's superior characteristics: high physical toughness; high resistance to degradation from UV, weather, ozone; wide useful temperature range; and high resistance to burning, flexing, and twisting damage. *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945).

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek in view of Radna as applied to Claim 1 above, and further in view of Holmberg (U.S. Patent Application No. US 2002/0071050 A1).

Thomanek in view of Radna discloses the invention as set forth above in Claim 1, except for the quick release mounting mechanism having a channel for receiving a pair of guide rails on a selected gear. However, the use of such corresponding channels and rails for mounting an optical system such as binoculars or range finders is well known in the art. For example, Holmberg teaches a conventional video camera with integrated range finder system (See for example Figures 1, 5-6), wherein the camera includes a pair of rails (See 14 in Figure 1) which mount onto a corresponding rail on a mounting assembly, such as a bow or rifle, (See 92 in Figures 5-6) so that the camera may be quickly attached and removed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the quick release mounting mechanism have a channel for receiving a pair of guide rails on a selected gear, as taught by Holmberg, in the apparatus of Thomanek in view of Radna, for the purpose of speeding

Art Unit: 2872

up removal and attachment of the gear (i.e. binocular or range finder) onto the mounting assembly.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek in view of Radna as applied to Claim 1 above, and further in view of Holmberg

Thomanek in view of Radna discloses the invention as set forth above in Claim 1, except for the gear being a range finder provided with a remote control. However, it is well known that optical systems including range finders may be mounted, and that such range finder systems may include remote controls. For example, Holmberg teaches a conventional video camera with integrated range finder system (See for example Figures 1, 5-6), which may be mounted onto a mounting assembly, such as a rifle or bow. In addition, such systems may include a remote control (See 61 in Figure 1) to remotely control various functions of the system. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the gear be a range finder provided with a remote control, as taught by Holmberg, in the apparatus of Thomanek in view of Radna, for the purpose of 1) extending the capabilities of the optical system by providing additional distance information, and 2) allowing for remote operation of the system without physically disturbing the mounting or optical apparatus.

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek in view of Radna, and further in view of Holmberg as applied to Claims 1, 9 above, and further in view of Ferguson (U.S. Patent Application Publication US 2005/0017152 A1).

Thomanek in view of Radna, and further in view of Holmberg discloses the invention as set forth above in Claims 1, 9 above, except for the remote control being provided with



a clip for clipping the remote control to an article of clothing of the wearer. However, providing clips on remote controls is known in the art. For example, Ferguson teaches a wireless remote control for an optical system (See for example Figure 1A), wherein the remote control (See 20 in Figure 1A) is provided with means for attaching the remote control onto the clothing of the user (See Paragraph 0073). Although clips are not specifically mentioned, such clips are well known for performing the function of attaching an article onto clothing, similar to that of other means, such as Velcro or snap fasteners. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the remote control be provided with a clip for clipping the remote control to an article of clothing of the wearer, as taught by Ferguson, in the apparatus of Thomanek in view of Radna, and further in view of Holmberg, to prevent loss or misplacement of the remote control during use of the apparatus.

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek in view of Radna as applied to Claims 1, 7 above, and further in view of Johnson (U.S. Patent No. 5437427).

Thomanek in view of Radna discloses the invention as set forth above in Claim 14, except for the sections being adjustable in length by tubing slidable one within the other and being retained by a tightenable clutch. However, it is well known and conventional to utilize telescoping tubes to provide length adjustment. For example, Johnson teaches a binocular mounting assembly (See for example Figure 1), wherein the support arm used to mount the binocular may be adjusted in length to provide positional adjustment by using telescoping tubes (See 18 in Figure 1). Although Johnson does not explicitly

disclose means for retaining the support arm after telescoping the support arm, such would have been evident and obvious to one having ordinary skill. The use of screws or a friction collar (e.g. tightenable clutch) would have been obvious as a means for retaining the support arm to keep it in place once positioned. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the sections be adjustable in length by tubing slidable one within the other and being retained by a tightenable clutch, as taught by Johnson, in the apparatus of Thomanek in view of Radna, for the purpose of providing large overall length changes as well as providing additional adjustment in the form of an additional freedom of movement around a rotation axis.

12. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek in view of Radna as applied to Claim 1 above, and further in view of Wannagot et al. (U.S. Patent No. 5703354).

Thomanek in view of Radna discloses the invention as set forth above in Claim 1, except for the quick release mounting mechanism being provided with a spring clip which retains a pair of guide rails on the gear in a channel formed in the quick release mounting mechanism. However, Wannagot et al. teaches a binocular night vision device attached to an assembly structure to a helmet (See for example Figures 1, 8). In particular, the assembly structure utilizes a pair of rails (See 44 in Figures 1, 8) to allow the binocular to be quickly attached and detached to the assembly structure via a dove-tail plate mounted (See 50 in Figure 2) on the binocular. Further, instead of screws, a retaining mechanism in the form of a pawl or spring clip (See col. 6, lines 23-50) is used

to engage the dove-tail plate to lock the binocular in place. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the quick release mounting mechanism be provided with a spring clip which retains a pair of guide rails on the gear in a channel formed in the quick release mounting mechanism, as taught by Wannagot et al., in the apparatus of Thomanek in view of Radna, for the purpose of speeding up removal and attachment of the gear (i.e. binocular or range finder) onto the mounting assembly.

13. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek in view of Radna, and further in view of Holmberg as applied to Claims 1, 6 above, and further in view of Vander Ley (U.S. Patent No. 4423914).

Thomanek in view of Radna, and further in view of Holmberg discloses the invention as set forth in Claims 1, 6, except for the channel being provided with a resilient pad at its distant end for securely retaining the pair of guide rails in position without movement. However, the use of such resilient pads in such channel-rail assemblies is known in the art. For example, Vander Ley teaches a conventional drawer slide mechanism (See for example Figure 1), wherein a pair of rails (See 42, 40 in Figure 1) integrated on a slide (See 16 in Figure 1) is inserted into a channel (See 18 in Figure 1). The distal end of the channel includes a rubber stop (See 36 in Figure 1) overlaying the end piece (See 34 in Figure 1) to provide a cushioned stop on the slide within the channel, while preventing movement once the slide is fully inserted into the channel. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the channel be provided with a resilient pad at its distant end for securely retaining the

pair of guide rails in position without movement, as taught by Vander Ley, in the apparatus of Thomanek in view of Radna, and further in view of Holmberg, for the purpose of preventing damage to the channel or rails of the mounting apparatus, while allowing for cushioned stops during insertion of the rails into the channel.

14. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek in view of Radna as applied to Claim 1 above, and further in view of Baril et al.

Thomanek in view of Radna discloses the invention as set forth above in Claim 1, except for the mounting bracket including a stop to prevent the support bar from pivoting beyond a predetermined point thereby preventing the gear from contacting the wearer. However, Baril et al. teaches a conventional helmet mounting assembly for an optical assembly (See for example Figures 1a, b), such as a night vision device (See 12 in Figures 1a, b), wherein the night vision device may be positioned in a deployed (See Figures 1a, 6) and stowed position (See Figures 1b, 5). In the deployed position (See Figure 6), the night vision device is held in position by both a locking ball (See 86 in Figure 6) and a physical stop in the form of the central portion of a spacer block (See 60 in Figures 4, 6; col. 5, line 25-col. 6, line 28). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the mounting bracket also include a stop to prevent the support bar from pivoting beyond a predetermined point thereby preventing the gear from contacting the wearer, as taught by Baril et al., in the apparatus of Thomanek in view of Radna, to prevent the user from getting hurt (especially from eye damage due to the gear striking the eyes) during use of the apparatus.

Art Unit: 2872

*Conclusion*

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 571-272-2315. The examiner can normally be reached on M-F 9:30 AM - 6 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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6/9/05